Abstract

A system and method for high power block upconversion having a stand-alone and surface-mountable component is provided. The HP-BUC system of the invention provides a "drop-in" component capable of mixing a local oscillator signal with an IF signal to produce an RF signal in the millimeter-wave and higher bands. In addition, the HP-BUC provides filtering of unwanted spurious signals and requires no further signal amplification prior to transmission, for example in a satellite communications system.